

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1.-10. (Cancelled)

Claim 11. (New) Electrical supply apparatus for an internal combustion engine which has a DC voltage network and an alternating current machine arranged externally on the internal combustion engine said apparatus comprising:

rectifier which electrically connects the DC voltage network and the alternating current machine; wherein,

the rectifier has at least two heat sinks, which each have at least one associated diode and are in the form of a negative pole or positive pole;

at least one of said heat sinks is arranged physically separate from the alternating current machine;

the at least one of said heat sinks has an associated fan, and is arranged via at least one spacing sleeve on a rectifier housing which is formed from plastic; and

the spacing sleeve is in the form of a voltage tap for the DC voltage network.

Claim 12. (New) Apparatus according to Claim 11, wherein the rectifier has an associated regulator arranged between said at least one of the heat sinks and the alternating current machine, on a frame part of the internal combustion engine.

Claim 13. (New) Apparatus according to Claim 11, wherein:

the fan is in the form of a cooler fan, and has a rotation speed that is dependent on the DC voltage network voltage; and

the cooler fan increases in rotation speed if the DC voltage network voltage drops below a critical value, U_{\min} .

Claim 14. (New) Apparatus according to Claim 11, wherein the heat sink is connected to the rectifier housing via at least one plastic screw.

Claim 15. (New) Apparatus according to Claim 11, wherein:

the rectifier housing is arranged in a flow direction of cooling air in the vicinity of a cooler fan;

at least one first face of the housing associated with the cooler fan is open; and

a second, opposite face of the housing has at least two ventilation openings for cooling air.

Claim 16. (New) Apparatus according to Claim 11, wherein:

a cable duct is provided between the rectifier and the alternating current machine; and

the cable duct is at least partially in the form of an electromagnetic screen.

Claim 17. (New) Apparatus according to Claim 11, wherein said at least one of the heat sink has at least two cooling ribs that are connected to one another or are attached to a rectifier housing of the rectifier on at least one side; and

the cooling ribs are open vertically downwards.

Claim 18. (New) Apparatus according to Claim 11, wherein:

the rectifier has a power of between 2.5 kW and 3.6 kW and comprises at least 12 diodes; and

at least two diodes in each case are connected in parallel.

Claim 19. (New) Apparatus according to Claim 11, wherein the alternating current machine is attached, together with a further unit, to the internal combustion engine, and has a common drive with the further unit.

Claim 20. (New) Apparatus according to Claim 12, wherein said at least one of the heat sinks is arranged upstream and/or downstream of the fan relative to a flow direction of cooling air; and

the rectifier housing has at least two ventilation openings.

Claim 21. (New) Apparatus according to Claim 12, wherein:

a cable duct is provided between the rectifier, the regulator and/or the alternating current machine; and

at least part of the cable duct forms an electromagnetic screen.